IN THE CLAIMS:

Claims 1-36 (Cancelled)

Claim 37 (New): A communication system, comprising:

a mux node including a first lightwave interface device for communication with a head end, said mux node further including a second lightwave interface device for transmitting an optical signal including analog and digital signals; and

a mini fiber node including a third lightwave interface device for receiving said optical signal from said second lightwave interface device of said mux node, said mini fiber node being further configured to communicate analog and digital signals to end user equipment via a wired connection,

wherein said mux node includes a mux/demux/router component that is operative to receive electrical signals that have been converted from optical signals received from said head end, demultiplexes the received electrical signals, and forwards separate demultiplexed signals to said second lightwave interface device that transmits said separate demultiplexed signals to designated mini fiber nodes.

Claim 38 (New): The communication system of claim 37, wherein said mux/demux/router component performs a local routing function, wherein an upstream signal received from a first mini fiber node is routed to a second mini fiber node instead of said head end.

Claim 39 (New): The communication system of claim 37, further comprising a second mini fiber node including a lightwave interface device for receiving a second optical signal from said mux node, said second mini fiber node being further configured to communicate analog and digital signals to end user equipment via a wired connection.

Claim 40 (New): The communication system of claim 37, wherein said analog signal is a broadcast signal.

Claim 41 (New): A communication method, comprising:

receiving, in a mux node, first optical signals from a head end;

transmitting, from said mux node, second optical signals to a mini fiber node, wherein said second optical signals include analog and digital signals;

converting, in said mini fiber node, said received second optical signals into first electrical signals for processing; and

transmitting second electrical signals to end user equipment via a wired connection,

further comprising receiving electrical signals that have been converted from optical signals received from said head end, demultiplexing the received electrical signals, and forwarding separate demultiplexed signals to designated mini fiber nodes.

Claim 42 (New): The communication method of claim 41, further comprising routing an upstream signal received from a first mini fiber node to a second mini fiber node instead of said head end.

Claim 43 (New): The communication method of claim 41, further comprising transmitting, from said mux node, third optical signals to a second mini fiber node, wherein said third optical signals include analog and digital signals.

Claim 44 (New): The communication method of claim 41, wherein said analog signal is a broadcast signal.